WSU-GEARS BASELINE SURVEY EXECUTIVE SUMMARY FALL 2021

Goal of WSU-GEARS ADVANCE

WSU GEARS is funded through the National Science Foundation (NSF) ADVANCE Initiative, which is purposed with increasing representation and success among women faculty in NSF-designated science, technology, engineering, mathematics, and social and behavioral science fields—referred to from here forward as STEM. The overarching goal of WSU-GEARS is to increase hiring, advancement, and retention of women in STEM while also highlighting the importance of intersectionality. WSU-GEARS features three interrelated components: 1) Wayne Drives, 2) Wayne Shifts, and 3) Wayne Accelerates. While Wayne Shifts and Wayne Accelerates focus on enhancing existing programs and creation of new programs, respectively, Wayne Drives focuses on data collection. As such, Wayne Drives is at the core of understanding how the institutional context and existing initiatives contribute to individual and shared employee experiences and perceptions. WSU-GEARS addresses three systematic and structural barriers to diversity, equity, and inclusion of women in STEM on our campus: 1) work/family/life strains, 2) hidden workload burden, and 3) toxic work environment. WSU-GEARS seeks to disentangle the work experience by understanding the intersectional implications of each barrier and provide relevant interventions (e.g., training and ongoing evaluation).

Purpose of the WSU-GEARS Baseline Survey

The purpose of the WSU-GEARS Baseline Survey was to understand the employee context during the first year of the grant program. Data from the baseline survey will be used in service to the grant and institution in three ways. First, the data allow for self-reporting of individual faculty experiences and captures such factors as perceptions of support, (mis)treatment, and access to work-related resources. We structured our approach to understanding the climate among full-time faculty by gathering data on each of the barriers using validated scales and scales adapted from other ADVANCE institutions. In addition to collecting self-report social identity information, we also integrated institutional data into our database and findings. Doing so allowed us to review the data for each barrier across layers of the institution as well as by individual attributes (e.g., gender identity or caretaker responsibilities). Second, the survey collects nuanced data that will inform future trainings, workshops, and other WSU-GEARS initiatives (i.e., Wayne Shifts and Wayne Accelerates). Third, the survey serves as a baseline of comparison for data collected in the second and third year of the grant. As such, the survey will support the overall evaluation of changes in individual experiences as it relates to grant-facilitated initiatives and ongoing and future institutional efforts.

Research Methodology

WSU GEARS administered the baseline survey during the Winter 2021 semester. The survey captured such information as family composition, social identities, and general perceptions of experiences as a WSU employee, satisfaction with the institution's response to COVID-19, and the three barriers. The survey was delivered via unique email links to N = 1,406 full-time faculty members, including STEM and non-STEM[1] faculty from all schools and colleges. The survey

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[1] In accordance with the National Science Foundation's defintion of STEM, faculty from the School of Medicine (SOM) are included in non-STEM.

was available for five weeks, and we received completed data from N = 327 faculty members (N = 337 completed at least 50% of the survey). Of the participants that provided self-report social identity information, 56.6% were women, 41.2% were men, .3% were genderfluid, .3% were non-conforming, and 1.7% chose not to share information about their gender identity. Participants were 31.8% STEM faculty and 68.2% non-STEM faculty. Visual representation of faculty demographic information using institutional and self-report data are presented in Figure 1 through Figure 8.

Survey Findings

Brief descriptions for barrier-related scale measures are provided in Table 1. Means by group are provided in Table 2 through Table 7. Correlations by barrier, gender, and STEM/non-STEM are provided in Table 11 through Table 22. To protect the data and identities of participants, survey findings are not reported for groups with less than 10 participants.

RESULTS

To identify and understand nuanced differences between full-time faculty by breakout groups (e.g., STEM women and STEM men), we calculated the high endorsement percentage for each scale measure. High endorsement percentage reflects the percentage of faculty that provided a mean (average) response of four (4) or higher to a given survey measure. For most measures, high endorsement reflects average answers of agree or strongly disagree—the positive extreme of a five-point scale. Table 8 provides "high endorsement percentages" for all full-time faculty, and Tables 9 and 10 provide high endorsement percentages for Non-STEM and STEM faculty by gender identity, respectively.

Work/Family/Life Strains

Table 10 reveals several non-trivial differences between reporting by STEM women and men. Differences between high endorsement rates for the work/family/life strains barrier were varied and, overall, small to moderate. High endorsement of perceived work-family conflict (10.42%) by STEM women was over three times that of men (3.45%), and women endorsed family-supportive supervisor behavior and family-supportive organization perceptions at lower rates compared to men. Additionally, the high endorsement percentage for work family blurring was higher for women than men. Taken together, these results suggest that women are experiencing higher levels of strain due to convergence between their work and non-work lives and perceive department level leadership and organizational policies as less supportive when compared to men.

Hidden Workload Burden

Turning to the hidden workload burden barrier, STEM women's high endorsement percentages were similar to that of STEM men. However, STEM women endorsed segmentation preferences at a slightly higher rate (32.65%) than STEM men (28.07%), whereas STEM men endorsed segmentation supplies at a slightly higher rate (12.50%) when compared to women (8.16). This suggests that STEM women prefer separating their work and non-work lives (i.e., segmentation preferences) slightly more than STEM men, but women view their jobs as less facilitating of this separation (i.e., segmentation supplies). Also, within this barrier, women and men were discrepant in their views of equity by gender identity. Gender equity favoring men (men gender equity) was not highly endorsed by STEM men (0%), whereas high endorsement for STEM women was 6.12% for this measure. Interestingly, high endorsement for equity

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favoring women (women gender equity) by STEM men was 22.81%, whereas it was 4.08% for STEM women. Shifting to job-related stressors, STEM women's high endorsement of time pressure was nearly twice that of men, whereas fewer men endorsed high rates of constraints. Taken together, STEM women likely view their environments as less equitable when it comes to the needs of women and less supportive of separating work from non-work. Moreover, women may have access to fewer job-related resources (higher constraints) and experience a greater imbalance between workload and necessary time to complete their work (time pressure). Unsurprisingly, this pattern may explain why the high endorsement percentage of job security by women (25.53%) was noticeably lower than that of men (39.66%).

Toxic Work Environment

Toxic work environment measures revealed more pronounced differences between STEM women and men. For STEM women, high endorsement of abusive environment (23.40%), inclusion of department (22.92%), culture/climate of department (6.38%), equality within department (31.25%), and work incivility (18.75%) differed from that of STEM men by factors ranging from two-to-six. This pattern suggests women witness and experience abuse and incivility at much higher rates than men, and women perceive their respective work environments as less welcoming and accommodating when compared to men.

Core Survey Measures

We also collected data on several "core" measures related to each of the barriers. Cynicism, decision making, emotional exhaustion, and perceived prestige had pronounced differences between STEM women and men. Cynicism and emotional exhaustion are components of burnout and reflect detachment from work and a sense of resource depletion, respectively. STEM women high endorsement was 12.50% for cynicism and 18% for emotional exhaustion, whereas the respective rates were 0% and 3.17% for STEM men. Whereas STEM women's high endorsement percentage of perceived prestige was twice that of men, their high endorsement percentage of decision making was approximately half that of men. These results suggest more women are likely experiences symptoms of burnout and a less favorable view of decision making within the department. Moreover, the peer support high endorsement percentage for women was 30% lower than that of men. Taken in context, this pattern suggests STEM women may experience higher degrees of burnout symptoms, see their opinions as less valued, and receive less help from peers. Interestingly, STEM women likely see themselves as being highly valued by other members of their field.

Translation of Findings

Communication

These findings will be reported to the campus through the WSU GEARS website, social media, email, and a series of summary reports for each barrier. Additionally, findings from the survey will be presented in future webinars, townhalls, and meetings with WSU administrators.

Application

Survey findings will be used to inform future qualitative interviews, focus groups, trainings, and other campus- and grant-related initiatives. To date, the survey data have informed independent trainings for deans and department chairs.

Conclusions and Next Steps

The survey data reveal differences in experiences and perceptions between STEM women and STEM men, indicating more favorable experiences for men than women. High endorsement data show the most pronounced differences are within the toxic work environment barrier. Future grant and institutional initiatives should consider focusing on improving the general work environment for STEM women. The WSU GEARS Team will work to integrate these findings into future initiatives and compared changes to data collected in grant years two and three.

Demographics of campus population compared to survey respondents.

Population and sample comparisons are derived from comparing institutional data (campus population) to survey respondent (sample). Data are presented as percentages but may not total to 100 due to exclusions.

Figure 1: Faculty Rank
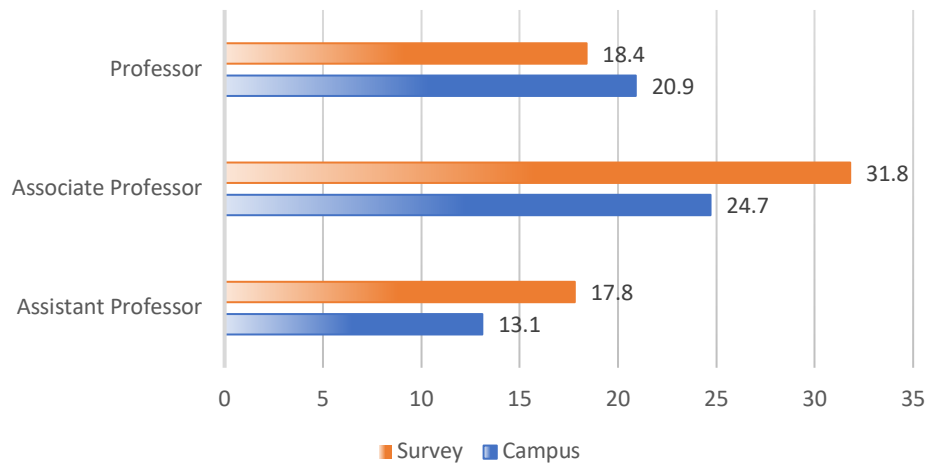
Figure 1 presents campus population vs. sample representation data by rank. The figure shows assistant and associate professors were overrepresented, whereas full professor respondents were underrepresented.

Figure 2: STEM
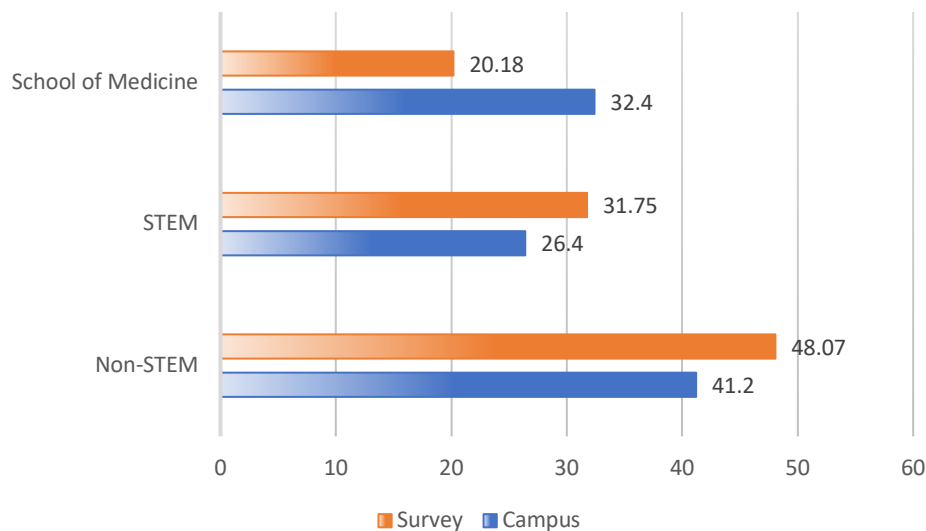
Figure 2 presents comparisons by population for STEM and non-STEM faculty, and both groups were overrepresented in the survey. In this figure only, School of Medicine (SOM) faculty and respondents were separated from non-STEM faculty. SOM faculty were underrepresented in the survey.

Figure 3: Sex
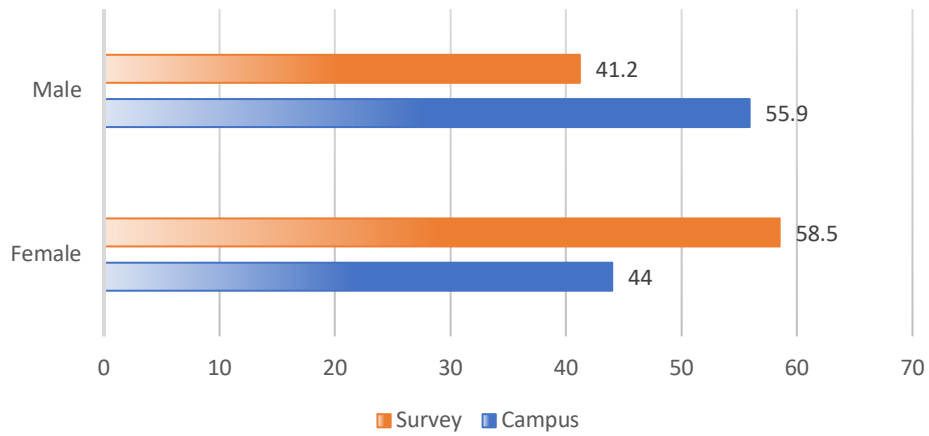
Figure 3 reflects data by sex (binary). Women respondents were overrepresented.

Figure 4: Race/Ethnicity
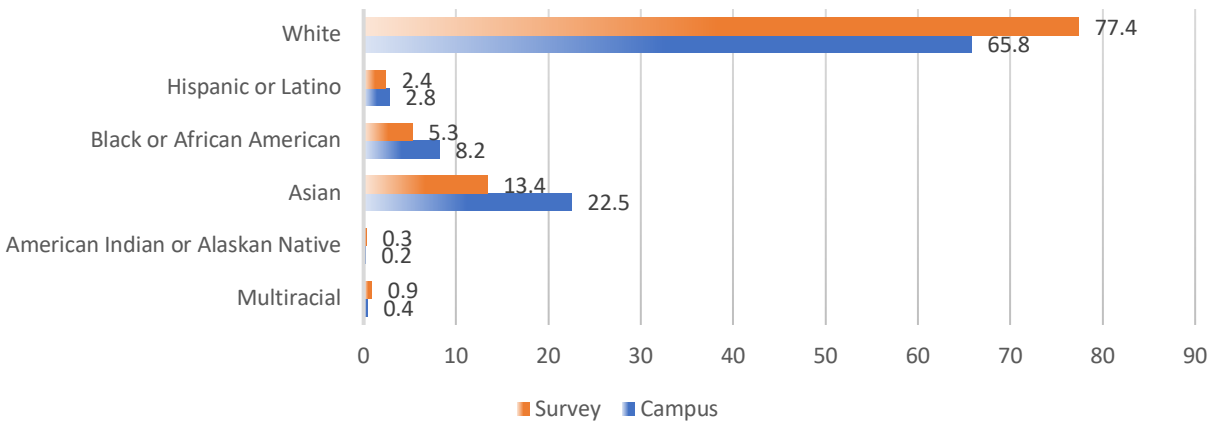
Figure 4 shows data by race/ethnicity. White, American Indian or Alaskan Native, and Multiracial faculty were overrepresented, but all other groups were underrepresented in the survey.

Self-report survey respondent demographics.

Demographic information in this section was self-reported in the survey. Due to limitations inherent to institutional data, this information may differ from demographic information in other area of the report. Representation comparisons cannot be computed due to a lack of a comprehensive, self-report baseline. Data are presented as percentages but may not total to 100 due to exclusions.

Figure 5: Gender Identity

Legend: ■ Men ■ Women ■ Non-conforming ■ Genderfluid ■ Prefer not to answer
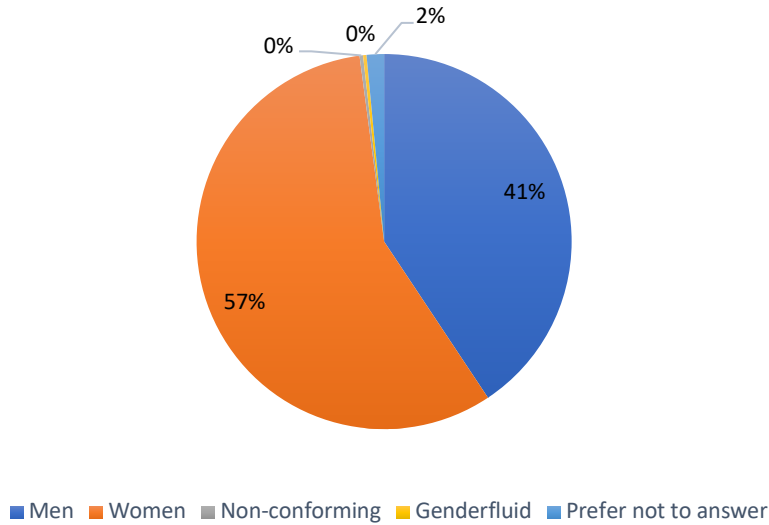
Figure 5 presents data by self-report gender identity. Women were the majority of survey respondents.

Figure 6: Racial/Ethnic Identity

Legend: ■ White ■ Black ■ Eastern Asian ■ Middle Eastern or North African ■ Prefer not to answer ■ Small cell size
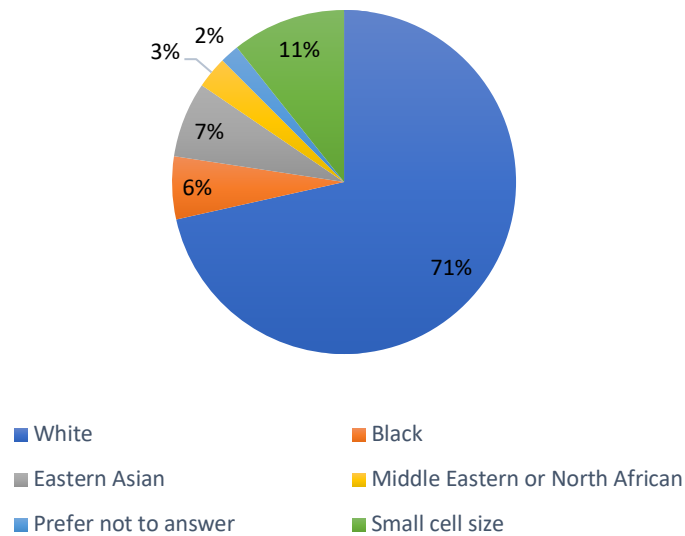
Figure 6 presents data by self-report racial/ethnic identity. White faculty were the majority of respondents. Small cell size presents social identity groups with less than 10 respondents.

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Figure 7: Underrepresented Minorities (URM)

Non-URM, Non-STEM
16%

URM, STEM
23%

Non-URM, STEM
10%

URM, Non-STEM
51%

■ URM, STEM ■ URM, Non-STEM ■ Non-URM, STEM ■ Non-URM, Non-STEM
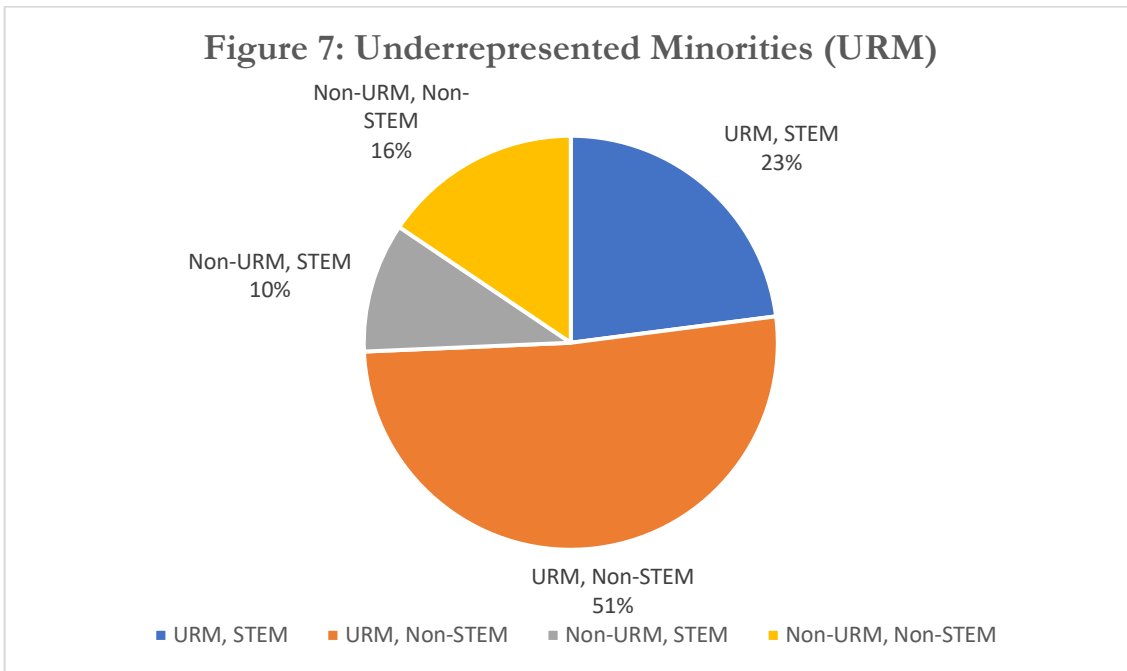
Figure 7 presents data by NSF URM definition by race/ethnicity only. This includes those that identify as women, Black/African American, Hispanic/Latino, American Indian, or Alaskan Native.

Figure 8: Caregiver Status

Multi-Role Caregiver
9%

Elder/Family Caregiver
4%

Parent/Guardian Caregiver
30%

Non-Caregiver
57%

■ Non-Caregiver ■ Parent/Guardian Caregiver ■ Elder/Family Caregiver ■ Multi-Role Caregiver

Figure 8 presents data by self-report caregiver status. Non-caregivers are those that reported not having current caregiver responsibilities. Parent/guardian caregiver are those that reported being pregnant or expecting at the time of the survey and/or caring for children (17 or younger). Multi-role caregivers are those that provide care to multiple forms of care.

WSU GEARS Baseline Survey measures and descriptions.

Table 1 provides a brief description of the barrier-related survey measures included in the survey. Participants typically responded to Likert (i.e., strongly disagree to strongly agree) or Likert-type items on a scale of one to five. The full list of survey items will be posted to the WSU GEARS website and is currently available upon request.

Table 1: Survey scales and descriptions.

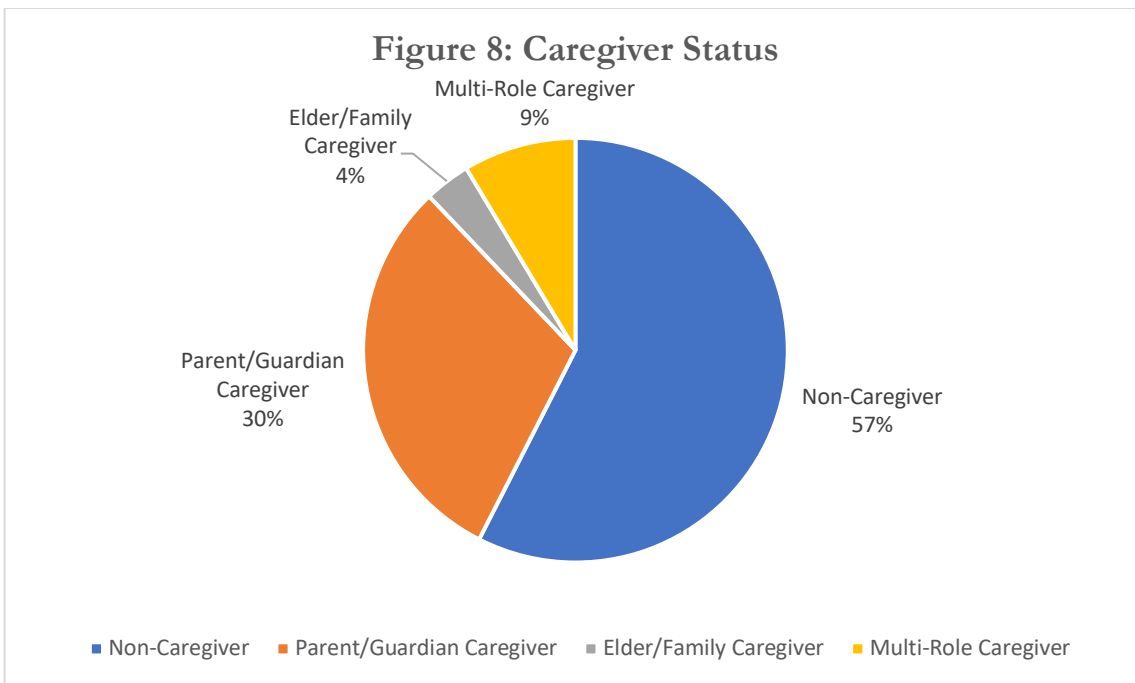| Scale	Description
Abusive Environment (Tepper, 2000)	Abusive environment measures the extent to which one has witnessed others being mistreated.
Behavioral Family Interfering with Work (Clark et al., 2018)	Family interfering with work measures how often one's work life affects one's non-work life.
Behavioral Work Interfering with Family (Clark et al., 2018)	Work interfering with family measures how one's workload affects one's life outside of work.
Burnout (Maslach et al., 1996)	The Maslach Burnout Inventory (MBI) is a three-dimensional scale that assesses the employee's sense of well-being via emotional exhaustion, professional efficacy, and cynicism
Collaboration (U-Mass ADVANCE)	Collaboration measures perceptions of collaboration opportunities and resources at Wayne State University.
Collective Self-Esteem (Brewer & Chen, 2007)	Collective self-esteem measures one's identification with their racial/ethnic identity group.
Competitive Climate (Fletcher et al., 2008)	Competitive climate assesses shared perceptions of performance-related expectations and social comparisons between colleagues.
Constraints (Spector & Jex, 1998)	Constraints measures perceptions of work-related difficulties faced due to work processes, colleagues, or available work resources.
COVID Satisfaction (Shoss et al., 2020)	COVID satisfaction measures attitudes toward Wayne State University's response to COVID-19.
Culture/Climate of Department (U-Mass ADVANCE)	Culture/climate of department shared perceptions of collegial treatment within the department.
Cynicism (Maslach et al., 1996)	Cynicism reflects an attitude of indifference about or psychological distancing from one's workplace, work role, and work outcomes.
Decision Making (U-Mass ADVANCE)	Decision making measures perceptions of departmental decision-making and communication processes.
Emotional Exhaustion (Maslach et al., 1996)	Emotional exhaustion reflects an experienced sense of emotional overextension or resource depletion due to work demands.
Equality within Department (U-Mass ADVANCE)	Equality within department measures perceptions of equal treatment between social identity groups (i.e., sex, race, and citizenship status) within the department.
External Presence (U-Mass ADVANCE)	External presence measures perceptions of how well known one is in the field.

Scale	Description
Fairness Values (Johnson et al., 2021)	Fairness values assesses the extent to which individuals believe that others in the workplace should be treated fairly regardless of their differences.
Family-Supportive Organization Perceptions (Allen et al., 2001)	Family-supportive organization perceptions assesses the extent to which employees believe the organization prioritizes the personal needs of its members.
Family-Supportive Supervisor Behaviors (Hammer et al., 2009)	Family-supportive supervisor behaviors reflect the perception of one's supervisor's behavioral response toward employee personal and family needs.
Gender Token Inclusion (U. of Houston ADVANCE)	Gender token inclusion measures perceptions of inclusion based solely or primarily on gender identity (i.e., tokenism).
Inclusion of Department (U-Mass ADVANCE)	Inclusion of department measures perceptions of belonginess within the department.
Job Evaluation Injustice (U. of Houston ADVANCE)	Job evaluation justice reflects perceptions of how others evaluate their effort and work-related outcomes.
Job Security (Hellgren et al., 1999)	Job security measures beliefs about future opportunities in the organization.
Men Gender Equity (King et al., 2009)	Men gender equity measures the extent to which men's needs are prioritized over that of women.
Peer Support (Haynes et al., 1999)	Peer support measures the extent to which one perceives they can rely on their colleagues.
Perceived Prestige (Herrbach et al., 2004)*	Perceived prestige measures how others in the field view the respondent's reputation.
Perceived Work Family Conflict (Minnote et al., 2015)	Perceived work family conflict measures perceptions of how work affects one's non-work life.
Professional Efficacy (Maslach et al., 1996)	Professional efficacy reflects the experienced sense of competence or preparedness stemming from recent or anticipated work outcomes.
Racial/Ethnicity Token Inclusion (U. of Houston ADVANCE)	Racial/ethnic token inclusion measures perceptions of inclusion based solely or primarily on racial/ethnic identity (i.e., tokenism).
Role Blurring (Galvin & Shieman, 2012)	Role blurring measures how often you must engage in work activities during non-work hours.
Segmentation Preferences (Kreiner, 2006)	Segmentation preferences measures individual preferences for keeping work-life separate from home-life (segmentation) or integrating the two (integration).
Segmentation Supplies (Kreiner, 2006)	Segmentation supplies assesses perceptions of the extent to which the organization provides the supports necessary for separating work and non-work.
Synergistic Values (Johnson et al., 2021)	Synergistic values assesses one's views about the impact of diversity (i.e., differences in race, gender, ability, sexual orientation, etc.) on workplace outcomes.

Scale	Description
Time Pressure (Johnson et al., 2021)	Time pressure assesses whether employees believe they have more work than what time allows.
Voice (Van Dyne & Lepine, 1998)	Voice assesses the extent to which one addresses work-related issues within the department.
Women Gender Equity (King et al., 2009)	Women gender equity measures the extent to which women's needs are prioritized over that of men.
Work Family Blurring (Desrochers et al., 2005)	Work family blurring is the perceived extent to which one can separate their work-life from their non-work life.
Work Incivility (Cortina et al., 2001)	Work incivility scale measures experienced mistreatment by colleagues.

Table 2
Means Reporting: STEM

	All Employees[2]	Non-STEM	STEM
Abusive Environment	2.39	2.38	2.41
Collaboration	3.47	3.49	3.43
Competitive Climate	3.08	3.06	3.14
Constraints	2.71	2.68	2.75
COVID Satisfaction	4.31	4.33	4.27
Collective Self-Esteem	3.04	2.96	3.21
Cynicism	2.19	2.14	2.29
Decision Making	3.48	3.51	3.42
Emotional Exhaustion	2.53	2.55	2.48
External Presence	3.82	3.83	3.82
Fairness Values	4.76	4.79	4.68
Family-Supportive Supervisor Behaviors	3.83	3.84	3.80
Family-Supportive Organization Perceptions	3.68	3.72	3.59
Family Interfering with Work	2.15	2.14	2.18
Gender Token Inclusion	2.75	2.76	2.74
Racial/Ethnicity Token Inclusion	2.73	2.73	2.73
Inclusion of Department	3.75	3.82	3.6
Culture/Climate of Department	3.43	3.51	3.27
Equality within Department	3.58	3.55	3.63
Job Evaluation Injustice	2.38	2.37	2.41
Job Security	3.53	3.56	3.47
Men Gender Equity	2.94	2.97	2.86
Women Gender Equity	2.92	2.85	3.07
Professional Efficacy	2.09	2.07	2.11
Peer Support	3.34	3.44	3.11
Perceived Prestige	3.85	3.91	3.73
Perceived Work Family Conflict	2.65	2.65	2.64
Role Blurring	4.07	4.04	4.14
Segmentation Preferences	3.07	3.11	2.97
Segmentation Supplies	2.33	2.30	2.40
Synergistic Values	4.42	4.40	4.46
Time Pressure	3.83	3.82	3.84
Voice	3.96	3.99	3.90
Work Family Blurring	3.50	3.46	3.58
Work Interfering with Family	3.07	3.09	3.04
Work Incivility	2.08	2.04	2.14

Note. All Employees $N = 324 - 356$; Non-STEM $N = 222 - 242$; STEM $N = 101 - 114$.

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[2] Full-time faculty includes all categories of faculty (e.g., lecturers, clinical, untenured, tenure-track, or tenured).

Table 3
Means Reporting: Gender Identity

	All Employees	Men	Women
Abusive Environment	2.39	2.04	2.64
Collaboration	3.47	3.49	3.45
Competitive Climate	3.08	2.95	3.19
Constraints	2.71	2.55	2.82
COVID Satisfaction	4.31	4.22	4.37
Collective Self-Esteem	3.04	3.36	2.82
Cynicism	2.19	2.06	2.28
Decision Making	3.48	3.66	3.35
Emotional Exhaustion	2.53	2.21	2.75
External Presence	3.82	3.80	3.85
Fairness Values	4.76	4.69	4.80
Family-Supportive Supervisor Behaviors	3.83	4.00	3.69
Family-Supportive Organization Perceptions	3.68	3.79	3.60
Family Interfering with Work	2.15	1.97	2.27
Gender Token Inclusion	2.75	2.57	2.88
Racial/Ethnicity Token Inclusion	2.73	2.63	2.79
Inclusion of Department	3.75	3.89	3.65
Culture/Climate of Department	3.43	3.60	3.31
Equality within Department	3.58	4.01	3.26
Job Evaluation Injustice	2.38	2.14	2.56
Job Security	3.53	3.53	3.53
Men Gender Equity	2.94	2.69	3.11
Women Gender Equity	2.92	3.05	2.83
Professional Efficacy	2.09	1.99	2.15
Peer Support	3.34	3.41	3.28
Perceived Prestige	3.85	3.75	3.93
Perceived Work Family Conflict	2.65	2.36	2.84
Role Blurring	4.07	4.00	4.12
Segmentation Preferences	3.07	2.88	3.20
Segmentation Supplies	2.33	2.54	2.19
Synergistic Values	4.42	4.25	4.54
Time Pressure	3.83	3.42	4.11
Voice	3.96	3.92	3.99
Work Family Blurring	3.50	3.44	3.54
Work Interfering with Family	3.07	2.82	3.26
Work Incivility	2.08	1.81	2.27

Note. All Employees $N = 324 - 356$; Men $N = 133 - 149$; Women $N = 187 - 205$.

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Table 4
Means Reporting: Tenure Status

	All Employees	On Track	9-Month, Tenured
Abusive Environment	2.39	2.31	2.59
Collaboration	3.47	3.56	3.37
Competitive Climate	3.08	3.11	3.11
Constraints	2.71	2.68	2.86
COVID Satisfaction	4.31	4.31	4.42
Collective Self-Esteem	3.04	3.14	2.99
Cynicism	2.19	2.25	2.28
Decision Making	3.48	3.41	3.54
Emotional Exhaustion	2.53	2.80	2.46
External Presence	3.82	3.83	3.98
Fairness Values	4.76	4.76	4.76
Family-Supportive Supervisor Behaviors	3.83	4.10	3.67
Family-Supportive Organization Perceptions	3.68	3.67	3.63
Family Interfering with Work	2.15	2.24	2.19
Gender Token Inclusion	2.75	2.77	2.77
Racial/Ethnicity Token Inclusion	2.73	2.80	2.71
Inclusion of Department	3.75	3.90	3.67
Culture/Climate of Department	3.43	3.58	3.26
Equality within Department	3.58	3.55	3.56
Job Evaluation Injustice	2.38	2.14	2.48
Job Security	3.53	3.72	3.43
Men Gender Equity	2.94	2.87	2.93
Women Gender Equity	2.92	2.85	3.01
Professional Efficacy	2.09	2.21	2.11
Peer Support	3.34	3.53	3.12
Perceived Prestige	3.85	3.54	3.99
Perceived Work Family Conflict	2.65	2.83	2.63
Role Blurring	4.07	3.97	4.14
Segmentation Preferences	3.07	3.45	2.80
Segmentation Supplies	2.33	2.30	2.25
Synergistic Values	4.42	4.59	4.36
Time Pressure	3.83	4.25	3.82
Voice	3.96	3.80	4.04
Work Family Blurring	3.50	3.55	3.52
Work Interfering with Family	3.07	3.29	2.97
Work Incivility	2.08	1.98	2.22

Note. All Employees $N = 324 - 356$; On-Track $N = 40 - 46$; 9-Month, Tenured $N = 140 - 157$.

Table 5
Means Reporting: Rank

	All Employees	Assistant Professor	Associate Professor	Professor
Abusive Environment	2.39	2.19	2.67	2.36
Collaboration	3.47	3.48	3.23	3.60
Competitive Climate	3.08	3.10	3.18	3.05
Constraints	2.71	2.61	3.03	2.47
COVID Satisfaction	4.31	4.35	4.38	4.44
Collective Self-Esteem	3.04	3.03	2.92	3.13
Cynicism	2.19	2.23	2.42	2.02
Decision Making	3.48	3.34	3.34	3.81
Emotional Exhaustion	2.53	2.68	2.56	2.21
External Presence	3.82	3.84	3.91	4.17
Fairness Values	4.76	4.77	4.78	4.73
Family-Supportive Supervisor Behaviors	3.83	4.05	3.57	3.83
Family-Supportive Organization Perceptions	3.68	3.65	3.49	3.89
Family Interfering with Work	2.15	2.30	2.30	1.96
Gender Token Inclusion	2.75	2.78	2.79	2.63
Racial/Ethnicity Token Inclusion	2.73	2.82	2.73	2.57
Inclusion of Department	3.75	3.79	3.50	3.92
Culture/Climate of Department	3.43	3.57	3.14	3.49
Equality within Department	3.58	3.64	3.39	3.69
Job Evaluation Injustice	2.38	2.19	2.65	2.27
Job Security	3.53	3.72	3.31	3.61
Men Gender Equity	2.94	2.85	2.97	2.88
Women Gender Equity	2.92	2.91	2.96	2.94
Professional Efficacy	2.09	2.21	2.20	1.94
Peer Support	3.34	3.48	3.05	3.14
Perceived Prestige	3.85	3.53	3.87	4.19
Perceived Work Family Conflict	2.65	2.86	2.79	2.30
Role Blurring	4.07	3.95	4.09	4.13
Segmentation Preferences	3.07	3.44	2.98	2.46
Segmentation Supplies	2.33	2.30	2.22	2.42
Synergistic Values	4.42	4.57	4.40	4.26
Time Pressure	3.83	4.14	3.87	3.61
Voice	3.96	3.68	3.93	4.00
Work Family Blurring	3.50	3.62	3.48	3.41
Work Interfering with Family	3.07	3.32	3.08	2.77
Work Incivility	2.08	1.92	2.45	1.85

Note. All Employees $N = 324 - 356$; Assistant Professor $N = 59 - 65$; Associate Professor $N = 102 - 113$; Professor $N = 57 - 66$.

Table 6
Means Reporting: Race

	All Employees	White	Black	Eastern Asian
Abusive Environment	2.39	2.38	2.29	2.37
Collaboration	3.47	3.52	3.26	3.33
Competitive Climate	3.08	3.10	2.95	3.19
Constraints	2.71	2.76	2.48	2.60
COVID Satisfaction	4.31	4.30	4.50	4.27
Collective Self-Esteem	3.04	3.31	1.79	2.57
Cynicism	2.19	2.21	2.13	2.33
Decision Making	3.48	3.49	3.59	3.48
Emotional Exhaustion	2.53	2.53	2.68	2.58
External Presence	3.82	3.85	3.35	3.79
Fairness Values	4.76	4.77	4.78	4.70
Family-Supportive Supervisor Behaviors	3.83	3.82	3.88	3.87
Family-Supportive Organization Perceptions	3.68	3.68	3.99	3.70
Family Interfering with Work	2.15	2.19	2.00	2.34
Gender Token Inclusion	2.75	2.74	3.10	2.65
Racial/Ethnicity Token Inclusion	2.73	2.59	3.87	2.75
Inclusion of Department	3.75	3.77	3.55	3.65
Culture/Climate of Department	3.43	3.44	3.36	3.43
Equality within Department	3.58	3.59	3.18	3.75
Job Evaluation Injustice	2.38	2.40	2.33	2.37
Job Security	3.53	3.50	3.62	3.58
Men Gender Equity	2.94	2.97	3.02	2.75
Women Gender Equity	2.92	2.94	2.83	2.83
Professional Efficacy	2.09	2.11	2.28	2.01
Peer Support	3.34	3.41	3.34	2.97
Perceived Prestige	3.85	3.86	3.67	3.75
Perceived Work Family Conflict	2.65	2.67	2.62	2.84
Role Blurring	4.07	4.10	3.77	3.81
Segmentation Preferences	3.07	3.03	3.65	3.21
Segmentation Supplies	2.33	2.34	2.14	2.37
Synergistic Values	4.42	4.43	4.54	4.28
Time Pressure	3.83	3.93	3.70	3.35
Voice	3.96	4.06	4.04	3.30
Work Family Blurring	3.50	3.56	3.36	3.41
Work Interfering with Family	3.07	3.09	2.81	3.25
Work Incivility	2.08	2.02	2.29	2.23

Note. All Employees $N = 324 - 356$; White $N = 231 - 250$; Black $N = 19 - 23$; Eastern Asian $N = 24 - 27$. Racial identity groups with fewer than 10 respondents were omitted to ensure confidential reporting.

Table 7
Means Reporting: Citizenship

	All Employees	Citizen	Permanent Resident
Abusive Environment	2.39	2.43	2.35
Collaboration	3.47	3.49	3.28
Competitive Climate	3.08	3.07	3.20
Constraints	2.71	2.74	2.65
COVID Satisfaction	4.31	4.29	4.36
Collective Self-Esteem	3.04	3.09	2.80
Cynicism	2.19	2.19	2.22
Decision Making	3.48	3.49	3.37
Emotional Exhaustion	2.53	2.56	2.41
External Presence	3.82	3.81	3.90
Fairness Values	4.76	4.75	4.78
Family-Supportive Supervisor Behaviors	3.83	3.86	3.59
Family-Supportive Organization Perceptions	3.68	3.72	3.51
Family Interfering with Work	2.15	2.17	2.08
Gender Token Inclusion	2.75	2.76	2.73
Racial/Ethnicity Token Inclusion	2.73	2.72	2.76
Inclusion of Department	3.75	3.75	3.76
Culture/Climate of Department	3.43	3.43	3.37
Equality within Department	3.58	3.53	3.69
Job Evaluation Injustice	2.38	2.37	2.53
Job Security	3.53	3.53	3.45
Men Gender Equity	2.94	2.96	2.84
Women Gender Equity	2.92	2.94	2.89
Professional Efficacy	2.09	2.09	2.09
Peer Support	3.34	3.43	2.87
Perceived Prestige	3.85	3.87	3.86
Perceived Work Family Conflict	2.65	2.65	2.64
Role Blurring	4.07	4.08	4.02
Segmentation Preferences	3.07	3.06	3.11
Segmentation Supplies	2.33	2.33	2.33
Synergistic Values	4.42	4.45	4.23
Time Pressure	3.83	3.87	3.63
Voice	3.96	4.05	3.66
Work Family Blurring	3.50	3.49	3.50
Work Interfering with Family	3.07	3.02	3.32
Work Incivility	2.08	2.05	2.29

Note. All Employees $N = 324 - 356$; Citizen $N = 262 - 286$; Permanent Resident $N = 54 - 62$.

High endorsement of scale measures.

Table 8 through Table 10 provide high endorsement percentages for each scale measure. High endorsement reflects the percentage of participants with a mean response of four (4) or higher to a given measure. When responding to a Likert scale, high endorsement reflects average responses of agree or strongly disagree across all scale items.

Table 8
High Endorsement Descriptive Information for All Measures

	N	Mean	SD	% High Endorsement
Abusive Environment	324	2.39	1.22	13.27
Collaboration	329	3.47	.87	32.52
Competitive Climate	353	3.08	.91	20.96
Constraints	331	2.71	.95	9.37
COVID Satisfaction	356	4.31	.79	77.53
Collective Self-Esteem	349	3.04	1.07	23.21
Cynicism	347	2.19	.84	4.32
Decision Making	325	3.48	.94	34.15
Emotional Exhaustion	355	2.53	1.00	12.11
External Presence	325	3.82	.81	52.00
Fairness Values	352	4.76	.40	94.60
Family-Supportive Supervisor Behaviors	346	3.83	1.11	54.34
Family-Supportive Organization Perceptions	331	3.68	.87	44.41
Family Interfering with Work	329	2.15	.69	1.22
Gender Token Inclusion	332	2.75	.64	5.12
Racial Token Inclusion	332	2.73	.68	9.04
Inclusion of Department	327	3.75	.93	51.99
Culture/Climate of Department	325	3.43	.89	29.85
Equality within Department	325	3.58	1.15	47.08
Job Evaluation Injustice	351	2.38	.81	5.41
Job Security	332	3.53	.93	39.16
Men Gender Equity	334	2.94	.65	9.58
Women Gender Equity	334	2.92	.67	8.08
Professional Efficacy	347	2.09	.63	.58
Peer Support	355	3.34	1.07	37.46
Perceived Prestige	328	3.85	.86	56.10
Perceived Work-Family Conflict	333	2.65	.86	6.31
Role Blurring	347	4.07	.72	65.13
Segmentation Preferences	334	3.07	1.17	33.23
Segmentation Supplies	329	2.33	.96	7.60
Synergistic Values	354	4.42	.74	81.64
Time Pressure	335	3.83	1.15	58.21

Voice	327	3.96	.82	59.02
Work Family Blurring	353	3.50	.92	37.11
Work Interfering with Family	327	3.07	.81	12.54
Work Incivility	325	2.08	1.02	8.31

Note. Sample sizes varied due to missing data. *N* = number of participants; *SD* = standard deviation. Measures based on response scale of 1 (lowest) to 5 (highest).

Table 9
High Endorsement Descriptive Information: Non-STEM Men and Women

	Non-STEM Men				Non-STEM Women			
	N	*Mean*	*SD*	*High Endorse %*	*N*	*Mean*	*SD*	*% High Endorse*
Abusive Environment	79	2.15	1.11	7.59	143	2.51	1.20	16.78
Collaboration	80	3.51	.87	38.75	144	3.47	.82	30.56
Competitive Climate	86	2.92	.95	18.60	154	3.14	.82	19.48
Constraints	79	2.54	.92	7.59	146	2.77	.94	10.34
COVID Satisfaction	86	4.20	.76	72.09	155	4.40	.71	80.65
Collective Self-Esteem	84	3.34	1.06	29.76	151	2.76	1.00	14.57
Cynicism	85	2.05	.85	4.71	150	2.18	.81	3.33
Decision Making	80	3.65	.90	37.50	142	3.43	.91	32.39
Emotional Exhaustion	86	2.22	.94	6.98	155	2.73	1.01	16.77
External Presence	78	3.86	.80	52.56	144	3.82	.76	52.08
Fairness Values	84	4.76	.32	98.81	154	4.81	.36	96.10
Family-Supportive Supervisor Behaviors	85	3.99	1.06	57.65	151	3.75	1.16	52.98
Family-Supportive Organization Perceptions	81	3.79	.74	43.21	144	3.67	.89	45.83
Family Interfering with Work	81	1.95	.66	1.23	144	2.23	.65	.70
Gender Token Inclusion	80	2.56	.53	2.50	145	2.87	.67	6.90
Racial Token Inclusion	80	2.59	.60	5.00	145	2.79	.72	11.03
Inclusion of Department	79	3.87	.89	56.96	144	3.80	.88	54.17
Culture/Climate of Department	79	3.58	.89	39.24	142	3.47	.81	30.28
Equality within Department	79	3.95	1.07	56.96	142	3.33	1.12	37.32
Job Evaluation Injustice	85	2.13	.73	3.53	154	2.51	.81	6.49
Job Security	80	3.50	.89	33.75	146	3.59	1.00	45.89
Men Gender Equity	80	2.69	.53	3.75	147	3.12	.68	15.65
Women Gender Equity	80	2.93	.64	8.75	147	2.81	.68	3.40
Professional Efficacy	85	1.97	.56	.00	150	2.13	.63	.67
Peer Support	86	3.47	1.07	40.70	155	3.41	1.09	42.58
Perceived Prestige	80	3.93	.87	61.25	144	3.91	.75	59.03
Perceived Work-Family Conflict	80	2.37	.85	3.75	146	2.80	.80	7.53
Role Blurring	83	3.94	.76	53.01	152	4.09	.68	67.11
Segmentation Preferences	80	2.78	1.11	21.25	147	3.29	1.14	42.18
Segmentation Supplies	80	2.46	.92	7.50	143	2.22	.93	5.59

	N	Mean	SD	% High Endorse	N	Mean	SD	% High Endorse
Synergistic Values	86	4.19	.84	69.77	154	4.52	.66	88.96
Time Pressure	80	3.29	1.33	42.50	147	4.10	1.01	72.11
Voice	80	3.97	.83	61.25	142	4.01	.80	62.68
Work Family Blurring	85	3.39	.91	32.94	154	3.50	.95	37.01
Work Interfering with Family	80	2.77	.81	3.75	142	3.26	.73	16.20
Work Incivility	80	1.84	.94	6.25	142	2.17	.96	7.04

Note. N = number of participants; *SD* = standard deviation; % High Endorse = % High Endorsement.
Measures based on response scale of 1 (lowest) to 5 (highest).

Table 10

High Endorsement Descriptive Information: STEM Men and Women

	STEM Men				STEM Women			
	N	*Mean*	*SD*	*High Endorse %*	*N*	*Mean*	*SD*	*% High Endorse*
Abusive Environment	54	1.88	1.07	3.70	47	3.03	1.29	23.40
Collaboration	55	3.46	.94	30.91	49	3.39	.93	28.57
Competitive Climate	62	2.99	.98	19.35	50	3.34	.96	32.00
Constraints	57	2.56	1.02	8.77	48	2.97	.85	10.42
COVID Satisfaction	63	4.24	.93	77.78	51	4.29	.88	76.47
Collective Self-Esteem	63	3.38	1.11	38.10	50	2.99	1.03	20.00
Cynicism	63	2.06	.64	.00	48	2.60	1.00	12.50
Decision Making	55	3.68	.94	43.64	47	3.11	.96	21.28
Emotional Exhaustion	63	2.20	.74	3.17	50	2.84	1.06	18.00
External Presence	54	3.71	.94	48.15	48	3.93	.72	56.25
Fairness Values	63	4.60	.50	87.30	50	4.79	.48	92.00
Family-Supportive Supervisor Behaviors	61	4.03	.89	60.66	48	3.51	1.23	43.75
Family-Supportive Organization Perceptions	56	3.78	.79	50.00	49	3.38	1.04	34.69
Family Interfering with Work	56	1.99	.70	1.82	47	2.41	.70	2.13
Gender Token Inclusion	57	2.59	.51	1.75	49	2.91	.72	8.16
Racial Token Inclusion	57	2.67	.63	7.02	49	2.79	.67	10.20
Inclusion of Department	55	3.92	.93	63.64	48	3.23	1.01	22.92
Culture/Climate of Department	56	3.63	.90	33.93	47	2.85	.89	6.38
Equality within Department	55	4.11	.96	70.91	48	3.08	1.14	31.25
Job Evaluation Injustice	62	2.15	.80	3.23	49	2.74	.80	8.16
Job Security	58	3.58	.86	39.66	47	3.34	.86	25.53
Men Gender Equity	57	2.69	.53	.00	49	3.05	.63	6.12
Women Gender Equity	57	3.23	.71	22.81	49	2.88	.57	4.08
Professional Efficacy	62	2.03	.64	1.61	49	2.21	.70	.00
Peer Support	63	3.32	1.01	31.75	50	2.85	1.01	22.00
Perceived Prestige	55	3.50	1.02	32.73	48	3.99	.87	66.67
Perceived Work-Family Conflict	58	2.36	.84	3.45	48	2.98	.81	10.42
Role Blurring	63	4.07	.77	66.67	48	4.22	.66	77.08
Segmentation Preferences	57	3.02	1.13	28.07	49	2.92	1.30	32.65
Segmentation Supplies	56	2.65	.93	12.50	49	2.10	1.02	8.16
Synergistic Values	63	4.34	.85	73.02	50	4.60	.59	90.00

	N	M	SD	% High Endorse	N	M	SD	% High Endorse
Time Pressure	58	3.60	1.05	37.93	49	4.13	1.03	65.31
Voice	55	3.85	.84	50.91	49	3.95	.82	53.06
Work Family Blurring	63	3.51	.93	36.51	50	3.67	.85	44.00
Work Interfering with Family	59	2.88	.88	13.56	45	3.26	.78	15.56
Work Incivility	54	1.76	.86	5.56	48	2.57	1.26	18.75

Note. *N* = number of participants; *SD* = standard deviation; % High Endorse = % High Endorsement.
Measures based on response scale of 1 (lowest) to 5 (highest).

Correlations.

Correlations are presented as supplemental information only. Sample sizes may vary by respondent population and due to missing data. These values should not be interpreted as tests of differences between comparison groups. Asterisks denote significance at an alpha level of .05 or lower.

Table 11
Work/Family/Life Strain Barrier: STEM Women

	1	2	3	4	5	6	7
1. Work Family Blurring	--						
2. Family-Supportive Supervisor Behaviors	.05	--					
3. Work Interfering with Family	.34*	-.18	--				
4. Role Blurring	.37*	.16	.23	--			
5. Perceived Work Family Conflict	.35*	-.25	.54***	.05	--		
6. Family Interfering with Work	.36*	-.17	.46**	.09	.72***	--	
7. Family-Supportive Organization Perceptions	-.09	.43**	-.36*	-.09	-.38**	-.30*	--

Note. *** $p < 0.001$. **$p < 0.01$. *$p < 0.05$.

Table 12
Work/Family/Life Strain Barrier: STEM Men

	1	2	3	4	5	6	7
1. Work Family Blurring	--						
2. Family-Supportive Supervisor Behaviors	-.08	--					
3. Work Interfering with Family	.56***	-.23	--				
4. Role Blurring	.42***	-.10	.28*	--			
5. Perceived Work Family Conflict	.41**	-.13	.71***	.26	--		
6. Family Interfering with Work	.46***	-.23	.34*	.31*	.64***	--	
7. Family-Supportive Organization Perceptions	-.40**	.33*	-.62***	-.11	-.40**	-.26	--

Note. *** $p < 0.001$. **$p < 0.01$. *$p < 0.05$.

Table 13
Work/Family/Life Strain Barrier: Non-STEM Women

	1	2	3	4	5	6	7
1. Work Family Blurring	--						
2. Family-Supportive Supervisor Behaviors	.02	--					
3. Work Interfering with Family	.34***	-.17*	--				
4. Role Blurring	.30***	.08	.29***	--			
5. Perceived Work Family Conflict	.27***	-.18*	.54***	.08	--		
6. Family Interfering with Work	.25**	-.04	.29***	-.04	.64***	--	
7. Family-Supportive Organization Perceptions	-.20*	.40***	-.37***	-.20*	-.33***	-.10	--

Note. *** $p < 0.001$. **$p < 0.01$. *$p < 0.05$.

Table 14
Work/Family/Life Strain Barrier: Non-STEM Men

	1	2	3	4	5	6	7
1. Work Family Blurring	--						
2. Family-Supportive Supervisor Behaviors	-.14	--					
3. Work Interfering with Family	.54***	-.02	--				
4. Role Blurring	.47***	-.01	.41***	--			
5. Perceived Work Family Conflict	.57***	-.17	.77***	.38***	--		
6. Family Interfering with Work	.44***	.08	.53***	.13	.64***	--	
7. Family-Supportive Organization Perceptions	-.35**	.34***	-.53***	-.31**	-.54***	-.28*	--

Note. *** $p < 0.001$. **$p < 0.01$. *$p < 0.05$.

Table 15
Hidden Workload Burden: STEM Women

	1	2	3	4	5	6	7	8	9
1. Job Security	--								
2. Constraints	-.37*	--							
3. Men Gender Equity	-.38**	.56***	--						
4. Women Gender Equity	.11	-.31*	-.26	--					
5. Time Pressure	-.15	.45**	.22	-.25	--				
6. Segmentation Preferences	-.30*	.18	-.07	-.02	.04	--			
7. Segmentation Supplies	.25	-.25	-.18	.18	-.23	-.12	--		
8. Gender Token Inclusion	-.14	.12	-.06	.11	.07	.16	-.10	--	
9. Racial/Ethnic Token Inclusion	-.21	.09	.07	.07	-.06	.27	.04	.49***	--

Note. *** $p < 0.001$. **$p < 0.01$. *$p < 0.05$.

Table 16
Hidden Workload Burden: STEM Men

	1	2	3	4	5	6	7	8	9
1. Job Security	--								
2. Constraints	-.46***	--							
3. Men Gender Equity	-.21	.13	--						
4. Women Gender Equity	.02	.19	.11	--					
5. Time Pressure	-.24	.41**	.04	-.01	--				
6. Segmentation Preferences	-.05	.05	-.01	-.14	-.04	--			
7. Segmentation Supplies	.25	-.20	-.03	-.10	-.48***	.03	--		
8. Gender Token Inclusion	-.09	.08	.44***	.02	.02	.00	.00	--	
9. Racial/Ethnicity Token Inclusion	.03	.16	.18	.07	-.10	-.07	.17	.67***	--

Note. *** $p < 0.001$. **$p < 0.01$. *$p < 0.05$.

Table 17
Hidden Workload Burden: Non-STEM Women

	1	2	3	4	5	6	7	8	9
1. Job Security	--								
2. Constraints	-.48***	--							
3. Men Gender Equity	-.25**	.38***	--						
4. Women Gender Equity	.17*	-.10	-.27***	--					
5. Time Pressure	-.16	.35***	.21*	.06	--				
6. Segmentation Preferences	-.04	.14	.05	-.04	.08	--			
7. Segmentation Supplies	.23**	-.35***	-.16	-.13	-.54***	-.08	--		
8. Gender Token Inclusion	.04	.01	.06	.10	-.02	-.03	.10	--	
9. Racial/Ethnicity Token Inclusion	-.06	-.01	-.05	-.02	-.11	.03	.04	.60***	--

Note. *** $p < 0.001$. **$p < 0.01$. *$p < 0.05$.

Table 18
Hidden Workload Burden: Non-STEM Men

	1	2	3	4	5	6	7	8	9
1. Job Security	--								
2. Constraints	-.45***	--							
3. Men Gender Equity	-.23*	.33**	--						
4. Women Gender Equity	-.02	.13	-.01	--					
5. Time Pressure	-.17	.42***	.37***	.23*	--				
6. Segmentation Preferences	-.17	.38***	.15	-.04	.23*	--			
7. Segmentation Supplies	.30**	-.19	-.23*	-.03	-.42***	.02	--		
8. Gender Token Inclusion	.04	.19	.56***	-.14	.18	.02	-.17	--	
9. Racial/Ethnicity Token Inclusion	-.02	.17	.50***	-.12	.15	.01	-.17	.84***	--

Note. *** $p < 0.001$. **$p < 0.01$. *$p < 0.05$.

Table 19
Toxic Work Environment: STEM Women

	1	2	3	4	5	6	7	8	9	10
1. Voice	--									
2. Collaboration	.05	--								
3. Decision Making	-.06	.30*	--							
4. Perceived Prestige	.39**	.14	-.16	--						
5. Work Incivility	.23	-.24	-.77***	.23	--					
6. Abusive Environment	.19	-.39**	-.65***	.20	.65***	--				
7. External Presence	.40**	.15	-.02	.79***	.12	-.03	--			
8. Inclusion of Department	.09	.48***	.52***	.02	-.42**	-.48***	.11	--		
9. Culture/Climate of Department	-.12	.37*	.77***	-.29*	-.57***	-.62***	-.06	.66***	--	
10. Equality Within Department	-.23	.11	.64***	-.20	-.49***	-.57***	-.10	.33*	.55***	--

Note. *** $p < 0.001$. ** $p < 0.01$. * $p < 0.05$.

Table 20
Toxic Work Environment: STEM Men

	1	2	3	4	5	6	7	8	9	10
1. Voice	--									
2. Collaboration	.27*	--								
3. Decision Making	.20	.57***	--							
4. Perceived Prestige	.28*	.40**	.12	--						
5. Work Incivility	.09	-.38**	-.61***	-.10	--					
6. Abusive Environment	.17	-.29*	-.51***	-.05	.74***	--				
7. External Presence	.13	.44***	.11	.80***	-.13	-.06	--			
8. Inclusion of Department	.28*	.66***	.68***	.30*	-.58***	-.42**	.25	--		
9. Culture/Climate of Department	-.08	.50***	.74***	.05	-.71***	-.69***	.00	.75***	--	
10. Equality Within Department	.14	.22	.51***	-.09	-.28*	-.51***	-.01	.30*	.45***	--

Note. *** $p < 0.001$. ** $p < 0.01$. * $p < 0.05$.

Table 21
Toxic Work Environment: Non-STEM Women

	1	2	3	4	5	6	7	8	9	10
1. Voice	--									
2. Collaboration	.25**	--								
3. Decision Making	.33***	.44***	--							
4. Perceived Prestige	.13	.06	.04	--						
5. Work Incivility	.09	-.33***	-.39***	-.06	--					
6. Abusive Environment	.12	-.29***	-.40***	.09	.63***	--				
7. External Presence	.05	.09	-.12	.60***	-.04	.08	--			
8. Inclusion of Department	.27**	.45***	.53***	.15	-.45***	-.41***	.06	--		
9. Culture/Climate of Department	.13	.43***	.61***	.08	-.55***	-.60***	-.05	.60***	--	
10. Equality Within Department	.10	.26**	.52***	.05	-.45***	-.47***	.00	.46***	.57***	--

Note. *** $p < 0.001$. **$p < 0.01$. *$p < 0.05$.

Table 22
Toxic Work Environment: Non-STEM Men

	1	2	3	4	5	6	7	8	9	10
1. Voice	--									
2. Collaboration	.16	--								
3. Decision Making	.33**	.55***	--							
4. Perceived Prestige	.28*	.34**	.21	--						
5. Work Incivility	-.06	-.24*	-.48***	-.09	--					
6. Abusive Environment	-.02	-.30**	-.39***	-.11	.59***	--				
7. External Presence	.18	.32**	.12	.74***	.14	.02	--			
8. Inclusion of Department	.42***	.49***	.70***	.49***	-.56***	-.39***	.29**	--		
9. Culture/Climate of Department	.30**	.53***	.70***	.26*	-.51***	-.58***	.15	.74***	--	
10. Equality Within Department	.03	.45***	.40***	.15	-.43***	-.54***	.10	.49***	.53***	--

Note. *** $p < 0.001$. **$p < 0.01$. *$p < 0.05$.